

Requested Patent: WO0165338A2

Title:

METHOD AND SYSTEM FOR HARVESTING FEEDBACK AND COMMENTS  
REGARDING MULTIPLE ITEMS FROM USERS OF A NETWORK-BASED  
TRANSACTION FACILITY ;

Abstracted Patent: WO0165338 ;

Publication Date: 2001-09-07 ;

Inventor(s):

LEVY DANIELE V (US); GROVE STEVE (US); MOHNIA DHEERAJ (US); POON  
ALEX (US) ;

Applicant(s):

EBAY INC (US); LEVY DANIELE V (US); GROVE STEVE (US); MOHNIA DHEERAJ  
(US); POON ALEX (US) ;

Application Number: WO2001US06709 20010228 ;

Priority Number(s): US20000515575 20000229 ;

IPC Classification: G06F ;

Equivalents: AU4192301, EP1269288 ;

ABSTRACT:

A method of displaying a user interface to harvest feedback information pertaining to transactions facilitated by a computerized transaction facility includes the display of multiple feedback windows, or other distinct areas, within a user interface displayed on a display device. Each feedback window includes transaction identifier information that identifies a respective transaction. Each feedback window also includes a feedback input that receives feedback information, pertaining to an associated transaction identified by the transaction information. The feedback input is displayed, within each feedback window, to indicate an association with the respective transaction information. Accordingly, feedback input for multiple transactions may conveniently be input.

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
7 September 2001 (07.09.2001)

PCT

(10) International Publication Number  
**WO 01/65338 A2**

- (51) International Patent Classification<sup>7</sup>: **G06F**
- (21) International Application Number: PCT/US01/06709
- (22) International Filing Date: 28 February 2001 (28.02.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
09/515,575 29 February 2000 (29.02.2000) US
- (71) Applicant (*for all designated States except US*): **EBAY, INC.** [US/US]; 2125 Hamilton Avenue, San Jose, CA 95125 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **LEVY, Daniele, V.** [BR/US]; 500 Beale Street, #301, San Francisco, CA 94105 (US). **GROVE, Steve** [US/US]; 6064 Burnbank Place, San Jose, CA 95120 (US). **MOHNIA, Dheeraj** [US/US]; 275 Twinlake Drive, Sunnyvale, CA 94089 (US). **POON, Alex** [US/US]; 14300 Saddle Mountain Drive, Los Altos, CA 94022 (US).
- (74) Agents: **MALLIE, Michael, J. et al.**; Blakely, Sokoloff, Taylor & Zafman LLP, 12400 Wilshire Boulevard, 7th floor, Los Angeles, CA 90025 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



**WO 01/65338 A2**

(54) Title: METHOD AND SYSTEM FOR HARVESTING FEEDBACK AND COMMENTS REGARDING MULTIPLE ITEMS FROM USERS OF A NETWORK-BASED TRANSACTION FACILITY

(57) Abstract: A method of displaying a user interface to harvest feedback information pertaining to transactions facilitated by a computerized transaction facility includes the display of multiple feedback windows, or other distinct areas, within a user interface displayed on a display device. Each feedback window includes transaction identifier information that identifies a respective transaction. Each feedback window also includes a feedback input that receives feedback information, pertaining to an associated transaction identified by the transaction information. The feedback input is displayed, within each feedback window, to indicate an association with the respective transaction information. Accordingly, feedback input for multiple transactions may conveniently be input.

**METHOD AND SYSTEM FOR HARVESTING FEEDBACK AND COMMENTS  
REGARDING MULTIPLE ITEMS FROM USERS OF A NETWORK-BASED  
TRANSACTION FACILITY**

**FIELD OF THE INVENTION**

The present invention relates generally to the field of e-commerce and, more specifically, to the harvesting of feedback information, opinions and comments regarding multiple items from users of a network-based transaction facility such as, for example, an Internet-based auction facility.

**BACKGROUND OF THE INVENTION**

In addition to access convenience, one of the advantages offered by network-based transaction facilities (e.g., business-to-business, business-to-consumer and consumer-to-consumer Internet marketplaces and retailers) and on-line communities is that participants within such facilities or communities may provide feedback to the facility, to other users of the facility and to members of an on-line community regarding any number of topics.

For example, an Internet-based retailer may provide a feedback mechanism whereby customers may provide feedback, in the form of comments or opinions, regarding goods or services offered for sale by the retailer. An Internet-based bookstore may, for example, provide a feedback mechanism whereby comments or opinions regarding particular books may be submitted via a web site operated by the book retailer. Such comments are then displayed within a web page, pertaining to the relevant book, generated by the Internet-based book retailer. Such comments and feedback are useful in assisting a purchaser with a buying decision.

For users of a network-based transaction facility, such as an Internet-based auction facility, feedback regarding other users is particularly important for enhancing user trust of the transaction facility. Indeed, a history of positive feedback for a trader that routinely uses an Internet-based auction facility may be particularly valuable and useful in providing other traders with a degree of confidence regarding a specific trader. Accordingly, a positive feedback history may establish the credibility and trustworthiness of a particular trader within an on-line trading

community. Similarly, a history of negative feedback may discourage other traders from transacting with a specific trader.

### SUMMARY OF THE INVENTION

According to one aspect of the present invention, a method of displaying a user interface, to harvest feedback pertaining to transactions facilitated by a computerized transaction facility, displays transaction identification information for each of the plurality of transactions within a user interface displayed on a display device. A feedback input for each of the plurality of transactions is displayed within the user interface, as displayed on the display device. Each feedback input is displayed so as to indicate an association with respect to transaction identification information.

Other features of the present invention will be apparent from the accompanying drawing and from the detailed description that follows.

### BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is illustrated by way of example and not limitation in the figures of the accompanying drawings, in which like references indicate similar elements and in which:

**Figure 1** is a block diagram illustrating an exemplary network-based transaction facility in the form of an internet-based auction facility.

**Figure 2** is a database diagram illustrating an exemplary database for the transaction facility.

**Figure 3** is a diagrammatic representation of an exemplary transaction record table of the database illustrated in **Figure 2**.

**Figure 4** is a diagrammatic representation of an exemplary feedback table of the database illustrated in **Figure 2**.

**Figure 5** is a diagrammatic representation of an exemplary feedback details table of the database illustrated in **Figure 2**.

**Figure 6** illustrates an exemplary interface sequence, according to one embodiment, that may be implemented by the transaction facility for the purposes of harvesting feedback, comments, opinions or reviews.

**Figures 7A - 7B** are flow charts illustrating an exemplary method of harvesting feedback, comments or reviews pertaining to transactions facilitated by a network-based transaction facility.

**Figure 8** illustrates an exemplary logon interface for accessing a feedback mechanism of the transaction facility.

**Figure 9** is a flow chart illustrating an exemplary method of displaying a user interface to harvest feedback, comments and opinions pertaining to multiple items.

**Figure 10** illustrates an exemplary "exceeds threshold" multiple feedback interface.

**Figure 11** illustrates an exemplary filtered multiple feedback interface, that may follow the "exceeds threshold" interface following filtering of transactions.

**Figure 12** illustrates an exemplary "does not exceed threshold" feedback interface.

**Figure 13** illustrates an exemplary "confirmation" interface.

**Figure 14** is an object diagram illustrating exemplary objects of the transaction facility that may be utilized to harvest multiple feedbacks, opinions or comments from users of a transaction facility.

Figure 15 is a diagrammatic representation of a machine, in an exemplary form of a computer system, in which a set of instructions for causing the machine to perform any of the methodologies of the present invention may be executed.

### DETAILED DESCRIPTION

A method and system for harvesting feedback information, comments and opinions regarding multiple items from users of a network-based transaction facility are described. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without these specific details.

#### Terminology

For the purposes of the present specification, the term "transaction" shall be taken to include any communications between two or more entities and shall be construed to include, but not be limited to, commercial transactions including sale and purchase transactions, auctions and the like.

#### Transaction Facility

Figure 1 is block diagram illustrating an exemplary network-based transaction facility in the form of an Internet-based auction facility 10. While an exemplary embodiment of the present invention is described within the context of an auction facility, it will be appreciated by those skilled in the art that the invention will find application in many different types of computer-based, and network-based, commerce facilities.

The auction facility 10 includes one or more of a number of types of front-end servers, namely page servers 12 that deliver web pages (e.g., markup language documents), picture servers 14 that dynamically deliver images to be displayed within Web pages, listing servers 16, CGI servers 18 that provide an intelligent interface to the back-end of facility 10, and search servers 20 that handle search requests to the facility 10. E-mail servers 21 provide, *inter alia*, automated e-mail communications to users of the facility 10.

The back-end servers include a database engine server 22, a search index server 24 and a credit card database server 26, each of which maintains and facilitates access to a respective database.

The Internet-based auction facility 10 may be accessed by a client program 30, such as a browser (e.g., the Internet Explorer distributed by Microsoft Corp. of Redmond, Washington) that executes on a client machine 32 and accesses the facility 10 via a network such as, for example, the Internet 34. Other examples of networks that a client may utilize to access the auction facility 10 include a wide area network (WAN), a local area network (LAN), a wireless network (e.g., a cellular network), or the Plain Old Telephone Service (POTS) network.

### Database Structure

Figure 2 is a database diagram illustrating an exemplary database 23, maintain by and accessed via the database engine server 22, which at least partially implements and supports the auction facility 10. The database 23 may, in one embodiment, be implemented as a relational database, and includes a number of tables having entries, or records, that are linked by indices and keys. In an alternative embodiment, the database 23 may be implemented as collection of objects in an object-oriented database.

Central to the database 23 is a user table 40, which contains a record for each user of the auction facility 10. A user may operate as a seller, buyer, or both, within the auction facility 10. The database 23 also includes item tables 42 that may be linked to the user table 40. Specifically, the tables 42 include a seller items table 44 and a bidder items table 46. A user record in the user table 40 may be linked to multiple items that are being, or have been, auctioned via the facility 10. A link indicates whether the user is a seller or a bidder (or buyer) with respect to items for which records exist within the item tables 42. The database 23 also includes a note table 48 populated with note records that may be linked to one or more item records within the item tables 42 and/or to one or more user records within the user table 40. Each note record within the table 48 may include, *inter alia*, a comment, description, history or other information pertaining to an item being auction via the auction facility 10, or to a user of the auction facility 10.

A number of other tables are also shown to be linked to the user table 40, namely a user past aliases table 50, a feedback table 52, a feedback details table 53, a bids table 54, an accounts table 56, an account balances table 58 and a transaction record table 60.

Figure 3 is a diagrammatic representation of an exemplary embodiment of the transaction record table 60 that is populated with records, or entries, for completed, or ended, transactions (e.g., auctions) that have been facilitated by the auction facility 10. The table 60 includes a transaction identifier column 62 that stores a unique transaction identifier for each entry, and an end date column 64 that stores a date value indicating, for example, a date on which a transaction was established. A bidder column 66 stores a user identifier for a bidder (or a purchaser), the user identifier comprising a pointer to further user information stored in the user table 40. Similarly, a seller column 68 stores, for each entry, a user identifier for a seller within the relevant transaction. An item number column 70 stores, for each entry, an item number identifying the goods or service being transacted, and a title column 72 stores, for each entry, a descriptive title for the relevant transaction or for the item being transacted.

It should be noted that, in one embodiment, an entry is only created in the transaction record table 60 for transactions that have been established, for example, by the conclusion of an auction process, or by some other offer and acceptance mechanism between the purchaser and the seller.

Figure 4 is a diagrammatic representation of an exemplary embodiment of the feedback table 52. The feedback table 52 stores summary information regarding feedback for users of the auction facility 10. The table 52 includes a user identifier column 74 that stores, for each entry, a user identifier providing a pointer to the user table 40. A total score column 76 stores, for each user entry, a total number of feedback comments (e.g., negative, positive and neutral), received for the relevant user. A total negative column 78 stores, for each user entry, the total number of negative feedback comments for the relevant user, and a total positive column 80 similarly stores, for each user entry, the total number of positive feedback comments received for that user. A number of retractions column 82 stores, for each user entry, the number of threads that the relevant user has retracted from auctions.



Figure 5 is a diagrammatic representation of one embodiment of the feedback details table 53, that is populated with entries reflecting the details of each feedback comment or opinion submitted by a user to the auction facility 10 regarding another user or item involved in a transaction. In one exemplary embodiment, users are only permitted to provide feedback pertaining to a transaction upon conclusion of that transaction. The feedback information may pertain to a further user that participated in the transaction, or to the object (e.g., goods or services) that was the subject of the transaction. In an alternative embodiment, for example, comments or opinions are provided regarding an item or service that is offered for sale or regarding an event. In these cases it will be appreciated that a transaction is necessarily required for feedback to be permitted.

The feedback details table 53 includes an item number column 84 including an item identifier that points to a record within the item tables 42. A comment column 86 stores, for each entry, the actual text of the feedback, comment, or opinion. A type column 88, in one embodiment, stores indication as to whether the comment is positive, negative or neutral. A date column 90 stores, for each entry, the date on which the feedback, comment or opinion was delivered. A response column 92 stores the text of a response submitted by a user (e.g., a user to which the original comment pertained) in response to the comment text stored in column 86. Similarly, a rebuttal column 94 stores the text of a rebuttal to such a response.

A commentator column 96 stores the user identifier of the user that submitted the original comment, stored in column 86, for the entry. A commentee column 98 stores the user identifier of the user to which comment may have been directed.

It will be appreciated that further dates and other descriptive information may also populate the feedback details table 53.

#### Multiple Feedback Items

In order to facilitate the convenient provision of feedback by users of the auction facility 10 pertaining to a transaction (e.g., an auction transaction) in which a user participated, the present invention proposes a method and system whereby a user may conveniently provide feedback pertaining to multiple transactions. By facilitating the harvesting of multiple feedbacks for a multiple transaction via a

unified mechanism, the invention addresses the inconvenience of tracking down multiple auctions via other indirect channels or mechanisms that may be provided by web site. In one embodiment, the present invention facilitates the provision of multiple feedbacks pertaining to respective multiple transactions via a single interface (e.g., a markup language page interface). While the present invention is discussed within the context of providing feedback regarding transactions within a user is participated, it will readily be appreciated that the present invention may be extended to providing multiple feedbacks, comments or opinions pertaining to respective multiple products, events or other entities. For example, a book reviewer, utilizing the teachings of the present invention, may conveniently provide comments, reviews or opinions pertaining to multiple books.

Figure 6 shows an interface sequence 100, according to an exemplary embodiment of the present invention, that may be implemented by the auction facility 10 for the purposes of harvesting feedback (or comments, opinions or reviews) from users of the auction facility 10. The auction facility 10 may, in one embodiment, only permit a user to provide feedback pertaining to a transaction within which that user wants a participant and which has been established or completed. For example, a transaction may be established through the identification of the winner of an auction, which creates the implicit understanding that the established transaction, between the purchaser (i.e., the winning bidder) and the seller, will be completed by performance of the reciprocal obligations underlying the transaction.

The sequence 100 of interfaces shown in Figure 6 will be described with reference to the flow chart shown in Figures 7A and 7B. Exemplary representations of the various interfaces included with the sequence 100 are shown in Figures 8 - 12.

On the ending of an auction, and the identification of winning bidder, the auction facility 10, via the e-mail servers 21, issues an end-of-auction e-mail 102 to both the winning bidder and the seller advising both parties of the outcome of the auction, and providing respective contact details to allow the parties to contact each others.

The interface sequence 100 commences with a logon interface 108 through which a user of the facility 10 provides at least a user identifier and associated

password. The logon interface 108 may be accessed, in one embodiment, via three mechanisms, namely an end-of-auction e-mail 102, a view item (auction ended) interface 104 or a feedback services interface 106, each of which comprises a markup language document (e.g., HTML document) including a hypertext link to an object (which will be described in further details below) that generates the logon interface 108 as well as further interfaces of the sequence 100. The end-of-auction e-mail 102, as noted above, is communicated by the e-mail servers 21 of the auction facility 10 to both a winning bidder and a seller upon the end of the auction process, the e-mail 102 notifying respective parties about the end of the auction and also providing contact details. The view item (auction ended) interface 104 is presented to a user, at conclusion of an auction, when seeking further information regarding the item that was the subject of the auction. For example, upon conclusion of an auction, a textual description of the subject of the auction may be hypertext linked to generate the interface 104. The feedback services interface 106 may be accessed, for example, through a site navigation menu or toolbar that presents the option to a user of leaving feedback. The feedback services interface 106 is typically used to leave feedback where a user does not know the item number identifying an item or where a user wishes to view feedback concerning multiple auctions within which t user has been a participant within a predetermined period of time (e.g., the past 60 days).

The interface 108, and subsequent interfaces 110 - 116, are generated by a collection of objects (or methods), exemplary embodiments of which are illustrated in **Figure 14**. Specifically, a logon interface 108 is generated by a "LeaveFeedbackToMultipleUsersShow" object 118. The object 118 is also responsible for generating a "threshold exceeded" multiple feedback interface 110, a filtered multiple feedback interface 112, a "does not exceed threshold" feedback interface 114 and a confirmation interface 116, as will be described in further detail below. To this end, the object 118 issues calls to a "LeaveFeedbackToMultipleUsers" object 120 that is responsible for actually recording feedback inputted via the interfaces 108 - 116 to the database 23, and specifically the feedback and feedback details tables 52 and 53. The object 118 also issues calls to a "GetSellerListForFeedback" object 122 that retrieves a list of sellers and items from the transaction record table 60, for a clearing user identified by a specific user identifier. The object 122 includes a

"UserItemRecord" vector 126 that is used as a container for the retrieved user and item information, the contents of the vector 126 being released to the object 118.

The object 118 similarly issues a call to a "GetBidderListForFeedback" object 124 that retrieves a list of bidders and items from the transaction record table 60 of the database 23 where the bidders have both items from a specific user identified by an inputted user identifier. The object 124 similarly uses the "UserItemRecord" vector to pass bidder and item information to the object 118.

The interfaces 108 - 116 will now be described within the context of a method 128, according to one embodiment of the present invention, of harvesting feedbacks, comments or opinions regarding multiple items from users of a network-based transaction facility. The method 128 is illustrated by the flow chart indicated in **Figure 7A and 7B.**

The method 128 commences with a logon confirmation operation at block 130 performed utilizing a user identifier and a password. Specifically, the logon interface 108, an exemplary embodiment of which is illustrated in **Figure 8**, provides a user identifier field 180 and password field 182 into which a user may enter a user identifier and password to enable the logon confirmation operation at block 130. The logon interface 108 illustrated in **Figure 8** also includes a further target user identifier field 184, into which a commentator user (identified by the user ID entered into fields 180) can specify the user identifier of a further user to which the feedback, or comments, are applicable. An item number field 186 also allows a commentator user 186 to specify a specific item number (e.g., identifying an auction) if the feedback that the commentator user wishes to leave is to be directed towards a specific item. Input into the fields 184 and 186 is optional, and may function as filter criteria so that only a limited number of information items are presented in a subsequent multiple feedback interface.

Returning to **Figure 7A**, at block 132, the object 118 issues calls to the "GetSellerListForFeedback" object 122 and the "GetBidderListForFeedback" object 124 to retrieve a list comprising multiple completed transactions for which the commentator user was either a successful bidder or seller. The objects 122 and 124 retrieve the relevant transaction information from the transaction record table 60 of the database 23, and only retrieve transaction records for which no feedback has been

left and which were established within a predetermined time period (e.g., the past 60 days). To this end, the objects 122 and 124 may identify records within the transaction record table 60 for which the feedback column 73 indicates that no feedback has been left, and transaction records for which date information included within the end date column 64 identifies the transaction has been established within the predetermined time period.

In one embodiment, the predetermined time period may be a default value that is automatically specified. In an alternative embodiment, a "time frame" input field may be provided within the logon interface 108, utilizing which a commentator user may specify the predetermined time period.

At decision box 134, the object 118 makes a determination as to whether more than a predetermined number (e.g., 25) transaction records are retrieved from the transaction record table 60 at block 132. Following a positive determination at decision box 134, at block 136, the object 118 retrieves a first template (e.g., an ISAPI page) that provides for pagination and includes a filter field, as will be described in further detail below. Following a negative determination at decision box 134, the object 118 retrieves a second template (e.g., an ISAPI page) that, while facilitating pagination, does not provide a filter field.

At block 138, the template retrieved at block 136 or 140 is populated by ISAPI code, utilizing the contents of the "UserItemRecord" vectors 126 returned by the objects 122 and/or 124 to generate a feedback interface (e.g., the multiple feedback interface 110 or 114).

At block 142, the feedback interface generated at block 138 (e.g., HTML code) is communicated, via the Internet 34, to the client program 30 (e.g., a browser) for display.

At decision box 144, a determination is made as to whether a filter criterion has been applied to the transaction records by a commentator user. If so, at block 146, the object 118 may issue fresh calls to the objects 122 and 124 to retrieve a modified list of transaction and user information. In an alternative embodiment, the object 118 may simply discard objects (or vectors) previously returned by the objects 122 and 124 that do not meet the filter criteria.

At block 148, feedback information, comments or opinions are received at the

auction facility 10 from the client program 30 and specifically from the relevant interface communicated at block 142. The feedback information may, in one embodiment, include a number of feedback items, each feedback item including date information specifying a date on which the feedback was provided, comment information providing the actual textual content of the feedback, type information indicating whether the feedback is positive, negative or neutral, user identifier information identifying both the commentator and the target (or commentee) users and any other pertinent information. In exemplary embodiments, which are further described below, the feedback interfaces may comprise markup language documents (e.g., HTML pages) that include radio buttons or check boxes that may be utilized to identify whether a feedback item is provided with respect to an underlying information item (e.g., an auction) and that may also be utilized to identify the type of feedback being provided (e.g., positive, negative or neutral).

At block 150, the object 118 makes a call to the "LeaveFeedbackToMultipleUsers" object 120 to create multiple instances of the object 120, each object containing the details of each of the feedback items received at block 148. Accordingly, instances of the object 120 may be viewed as containers for each of the feedback items.

Proceeding to **Figure 7B**, at decision box 190, a determination is made as to whether any of the feedback has been categorized via the commentator user as being of a negative or neutral type. If so, at block 192, the object 118 generates the confirmation interface 116 (e.g., in the form of an HTML document) that is communicated from the auction facility 10 to the client program 30. The confirmation interface 116 prompts the commentator user for confirmation regarding any negative or neutral comments. At decision box 194, a determination is made as to whether all negative or neutral feedback comments have been confirmed. If not, the unconfirmed feedback is deleted at block 196. Following a positive determination at decision box 194, or following a negative determination at decision box 190, or following completion of block 196, the method proceeds to block 152, where the object 118 issues an ISAPI call to an error\_check function (not illustrated) that comprises a kernel module, and that performs a number of checks with respect to each feedback item, embodied within an instance of the object 120. For example,

the `error_check` function may determine whether the commentator, or target, user has been suspended from the auction facility 10, whether feedback has already been submitted for the respective transaction, whether the commentator user has been a member of the auction facility 10 for less than predetermined time (e.g., five days) or whether a reserve price has been met for the relevant item (or transaction) to which the feedback comment pertains. If any of the conditions embodied within the `error_check` function are not met, the relevant feedback comment is deleted, for example by deleting the instance of the object 120 embodying the feedback comment.

At block 154, ISAPI calls are issued from each of the objects 120 to populate the database 23, and more specifically the feedback table 52 and the feedback details table 53, with the information contained in the instances of the objects 120, which operation is then actually performed at block 156. The method 128 then ends at block 158.

Having now described server-side operations with respect to **Figures 7A and 7B**, a description is now provided of an exemplary method 200 of displaying a user interface to harvest feedback, comments or opinions pertaining to multiple items (e.g., transactions). The method 200 shall be described within the context of the interfaces 110, 112 and 114 illustrated in **Figure 6** and with reference to a flowchart illustrated in **Figure 9**.

As stated above with respect to **Figure 7A**, at block 142, a server may communicate a feedback interface over the communications network to a client program 30 (e.g., a browser) for display. Accordingly, the method 200 commences at block 202 with the receipt of a feedback interface in the form of a markup language document. The feedback interface may be, depending on the number of transactions, the "exceeds thresholds" multiple feedback interface 110 or the "does not exceed threshold" multiple feedback interface 114. The feedback interface, in one embodiment, comprises a markup language document (e.g., an HTML document).

At block 204, the client program 30 then proceeds to display transaction identifier information for a plurality of transactions within a single interface. **Figure 10** provides an exemplary embodiment of the "exceeds threshold" multiple feedback interface 110, and the transaction identifier information is shown to include user identifier information 230, identifying the other party (e.g., the winning bidder or the

seller) involved in the transaction, an item identifier providing an item number (or code) identifying the subject matter of the transaction, an item description 234 providing an alpha-numeric description of the subject of the transaction, ended date information 236, indicating the date on which the transaction was established through the ending of the auction process.

At block 206, a feedback input field 238 is displayed to indicate an association between the input field and the transaction identifier information. For example, referring again to the exemplary feedback interface 110 shown in Figure 10, a feedback input field 238 is displayed on the interface 110 adjacent the transaction identifier information. The feedback input field 238 can receive both textual and numeric input. In an alternative embodiment, a drop-down menu may be provided to input one of a selected set of comments into the feedback input field 238.

At block 208, the interface then receives user-inputted feedback information (e.g., comments or opinions) via the feedback input field 238. This feedback may be provided by an alpha-numeric input device, such as a keyboard, or by voice recognition software. In an alternative embodiment of the invention, the input field 238 may be replaced by a voice recording mechanism that allows the commentator user to leave voice feedback by initiating a recording process.

At block 210, the method 200 displays a type input mechanism adjacent the identifier information for each transaction, the type input mechanism allowing a commentator user to specify type information (e.g., positive, negative or neutral) feedback for the relevant transaction. Referring again to Figure 10, an exemplary feedback type input 240 is shown to include three radio buttons, one of which is selectable to identify the input into the feedback input field 238 as being positive, negative or neutral. Accordingly, at block 212, the interface 110 receives user-inputted type information via the feedback type input 240.

At block 214, the method 200 displays a "skip" input 242, in the exemplary form of a radio button or check box, adjacent the identification information for each transaction displayed within the interface. Figure 10 shows an exemplary skip input 242 comprising a radio button that is user-selectable to indicate that the commentator user does not wish to provide feedback regarding the relevant transaction. In an alternative embodiment, a check box may be provided to allow user indication that



no feedback is being provided.

As is well known in the art, within HTML a check box or radio button is defined by TYPE, NAME and VALUE specifiers, where the TYPE specifier specifies either a check box or a radio button, the NAME specifier specifies a variable where a return value will be stored and the VALUE specifier stores what will be returned in the variable if the check box is checked, or the radio button is selected. Accordingly, feedback type and skip indications may be communicated from the interface 110 in pairs to an ISAPI function implemented by the objects as described above. Each information pair may comprise, for example, a name and a value.

At block 216, the interface 110 receives the user inputted skip information (or identification) via the skip input 242.

At decision box 218, a determination is made as to whether the user selects a "submit" button to communicate the information inputted via the interface 110 to the server side. If not, the method 200 loops through blocks 204 - 216. Alternatively, if the user does select the "submit" button at decision box 218, field identifier and field content information (e.g., feedback, type information and skip information) is communicated in pairs from the client program 30 to the server side. The method 200 then ends at block 222.

### User Interfaces

Further descriptions of exemplary user interfaces will now be described with reference to Figures 10 - 13. While the exemplary interfaces are described as comprising markup language documents displayed by a browser, it will be appreciated that the described interfaces could comprise user interfaces presented by any Windows® client application or stand-alone application, and need not necessarily comprise markup language documents.

Figure 10, as described above, illustrates an exemplary "exceeds threshold" feedback interface 110 that provides a predetermined maximum number (e.g., 25) of discrete feedback windows 244, each window 244 being dedicated to a specific one of a number of transactions or items. Each feedback window 244 includes transaction (or item) identification information, a feedback type input 240, a feedback skip input 242 and a feedback input field 238. Accordingly, a collection of feedback windows

244, all displayed in a single interface 110, allow a commentator to provide feedback pertaining to multiple transactions or items in a convenient manner without having to advance through a series of distinct interfaces.

The number of feedback windows 244 displayed in a single interface is limited (e.g., 25), and accordingly the interface 110 provides retreat and advance buttons 246 and 248 that allow a commentator user to retreat to a previous collection of feedback windows 244, or advance to a subsequent collection of feedback windows 244.

The "exceeds threshold" feedback interface 110 furthermore includes a filter criteria input field 250, into which a commentator user may input a user identifier, or item number, to limit the number of transactions, or items, pertaining to which feedback is to be submitted. For example, where the number of transactions for which the commentator may leave feedback exceeds a predetermined threshold (e.g., 50), the filter allows a commentator user to reduce the number of transactions by specifying only transactions involving a particular user or pertaining to a specific item. In alternative embodiments, the filter criteria may comprise a keyword on which a search is done to locate any transactions for which the descriptions contain relevant keywords. The filter mechanism underlying the filter criteria input field 250 allows a commentator user conveniently to limit the number of feedbacks displayed within an interface, and also conveniently to identify specific transactions for which the commentator user wishes to leave feedback.

To this end, **Figure 11** illustrates an exemplary filtered multiple feedback interface 112 that may follow the "exceeds threshold" feedback interface 110 following filtering of the transactions presented in the interface 110.

**Figure 12** illustrates an exemplary "does not exceed threshold" feedback interface 114, which is substantially similar to the filtered multiple feedback interface 112, but does not include the retreat and advance buttons 246 and 248. It will also be noted that the interface 114 does not provide a filter criteria input field 250.

**Figure 13** illustrates an exemplary embodiment of the confirmation interface 116, described above with reference to **Figure 6**.

In summary, it will be appreciated that the above described interfaces, and underlying technologies, provide a convenient vehicle for the inputting of feedback, comments or opinions regarding multiple items, or transactions, via a single user

interface.

Figure 15 shows a diagrammatic representation of a machine in the exemplary form of a computer system 300 within which a set of instructions, for causing the machine to perform any one of the methodologies discussed above, may be executed. In alternative embodiments, the machine may comprise a network router, a network switch, a network bridge, Personal Digital Assistant (PDA), a cellular telephone, a web appliance or any machine capable of executing a sequence of instructions that specify actions to be taken by that machine.

The computer system 300 includes a processor 302, a main memory 304 and a static memory 306, which communicate with each other via a bus 308. The computer system 300 may further include a video display unit 310 (e.g., a liquid crystal display (LCD) or a cathode ray tube (CRT)). The computer system 300 also includes an alpha-numeric input device 312 (e.g. a keyboard), a cursor control device 314 (e.g. a mouse), a disk drive unit 316, a signal generation device 320 (e.g. a speaker) and a network interface device 322

The disk drive unit 316 includes a machine-readable medium 324 on which is stored a set of instructions (i.e., software) 326 embodying any one, or all, of the methodologies described above. The software 326 is also shown to reside, completely or at least partially, within the main memory 304 and/or within the processor 302. The software 326 may further be transmitted or received via the network interface device 322. For the purposes of this specification, the term "machine-readable medium" shall be taken to include any medium that is capable of storing or encoding a sequence of instructions for execution by the machine and that cause the machine to perform any one of the methodologies of the present invention. The term "machine-readable medium" shall accordingly be taken to include, but not be limited to, solid-state memories, optical and magnetic disks, and carrier wave signals.

Thus, a method and system for harvesting feedback information, comments, and opinions regarding multiple items from users of a network-based transaction facility have been described. Although the present invention has been described with reference to specific exemplary embodiments, it will be evident that various modifications and changes may be made to these embodiments without departing

from the broader spirit and scope of the invention. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

CLAIMS

What is claimed is:

1. A method of harvesting feedback pertaining to transactions facilitated by a network-based transaction facility, the method including:

identifying a plurality of transactions associated with a first user;

communicating user interface information to a client via a communications network, the user interface information including transaction information concerning at least first and second transactions of the plurality of transactions and specifying a feedback interface facilitating user input of feedback information for each of the at least first and second transactions of the plurality of transactions; and

receiving the feedback information, provided through the feedback interface, for each of at least the first and second transactions, the feedback information being received via the communications network.

2. The method of claim 1 wherein the identifying of the plurality of transactions comprises identifying completed transactions in which the first user participated.
3. The method of claim 2 including identifying the completed transactions as transactions in which the first user participated as a buyer.
4. The method of claim 2 including identifying the completed transaction as transactions in which the first user participated as a seller.
5. The method of claim 2 wherein the identifying comprises identifying the completed transactions in which the first user participated within a predetermined time period.

6. The method of claim 1 wherein the communication of the user interface information comprises communicating a markup language document and wherein the transaction information includes text information describing at least the first and second transactions.
7. The method of claim 6 wherein the user interface information defines a respective feedback input field associated with each of the first and second transactions via which the feedback information for each of at least the first and second transactions is user-inputted.
8. The method of claim 6 wherein the user interface information defines a type indicator via which type information, indicating a feedback type for the feedback information for each of the at least first and second transactions, is user-inputted.
9. The method of claim 8 wherein the type information indicates the feedback type as being any one of a group including positive feedback, negative feedback and neutral feedback.
10. The method of claim 8 wherein the type indicator comprises any one of a group including a collection of check boxes and a collection of radio buttons.
11. The method of claim 6 wherein the user interface information defines a respective skip indicator for each of the at least first and second transactions, each skip indicator being user-selectable to indicate whether or not feedback is being provided via the feedback interface for an associated transaction.
12. The claim of 11 wherein each of the respective skip indicators comprises any one of a group comprising a check box and a radio button.
13. The method of claim 1 wherein the user interface information defines a filter input field via which a filter criteria is user-inputted, the filter criteria being applied

to the plurality of transactions to define a subset thereof for display via the feedback interface.

14. The method of claim 13 wherein the filter criteria comprises a user identifier identifying a second user associated with at least one transaction of the plurality of transactions.

15. The method of claim 13 wherein the filter criteria comprises a transaction identifier identifying at least one of the plurality of transactions.

16. The method of claim 1 including populating a feedback data structure with the feedback information for each of the at least first and second transactions.

17. The method of claim 1 wherein the transaction information includes any one of a group including user, item, description and date information.

18. A method of displaying a user interface to harvest feedback pertaining to transactions facilitated by a computerized transaction facility, the method including:

displaying transaction identification information for each of a plurality of transactions within a user interface displayed on a display device; and

displaying a feedback input for each of the plurality of transactions within the user interface as displayed on the display device,

wherein each feedback input is displayed so as to indicate an association with respective transaction identification information.

19. The method of claim 18 wherein the transaction identification information includes any one of a group including user information identifying a party to a transaction, item information identifying a subject of a transaction and date information indicating a date associated with the transaction period.

20. The method of claim 18 wherein the feedback input comprises an input field for receiving any one of text, numeric or alpha-numeric information.
21. The method of claim 18 wherein the feedback input comprises at least one of a plurality of user-selectable feedback options.
22. The method of claim 21 wherein the plurality of user-selectable feedback options are presented in the form of a drop-down menu.
23. The method of claim 21 wherein the plurality of user-selectable feedback options are type options that indicate a feedback type associated to feedback information.
24. The method of claim 23 wherein the feedback type includes any one of a group including positive feedback, negative feedback and neutral feedback.
25. The method of claim 21 wherein the plurality of user-selectable feedback options are presented as being user-selectable by any of a group including a plurality of check boxes and a plurality of radio buttons.
26. The method of claim 18 including displaying a skip input for each of the plurality of transactions within the user interface, each skip input being user-selectable to indicate whether or not feedback is being provided for associated transaction identification information.
27. The method of claim 18 wherein the user interface comprises a markup language document displayed within a browser.
28. The method of claim 18 wherein the association is indicated by display of a respective feedback input proximate the specific transaction identification information.



29. The method of claim 18 wherein the association is indicated by display of a graphical indication that indicates the association between the respective feedback input and the specific transaction identifier information.

30. A method of harvesting comments pertaining to items of a network-based transaction facility, the method including:

identifying a plurality of items;

communicating user interface information to a client via a communications network, the user interface information including item information concerning at least first and second items of the plurality of items and specifying an interface facilitating user input of comments pertaining to each of the at least the first and second items of the plurality of items; and

receiving the comments, provided through the input interface, for each of the at least first and second items, the comments being received via the communications network.

31. A method of displaying a user interface to harvest comments pertaining to items of a computerized transaction facility, the method including:

displaying item identification information for each of a plurality of items within a user interface displayed on a display device; and

displaying a comment input for each of the plurality of items within the user interface as displayed on the display device

wherein each comment input is displayed so as to indicate an association with respective transaction identification information.

32. A system for harvesting comments pertaining to items of a network-based transaction facility, the system including:

a search function to identify a plurality of items specified by a first user;

a display function to communicate user interface information to a client via a communications network, the user interface information including item information concerning at least first and second items of the plurality of items and specifying a comment interface facilitating user input of comment information for each of the at least first and second items of the plurality of items; and

a receive function to receive the comment information, provided through the comment interface, for each of the at least first and second items, the comment information being received via the communications network.

33. A system for harvesting comment information pertaining to an item of a network-based transaction facility, the system including:

first means for identifying a plurality of items specified by a first user;

second means for communicating user interface information to a client via a communications network, the user interface information including item information concerning at least first and second items of the plurality of items and specifying a comment interface facilitating user input of comment information for each of the at least first and second items for the plurality of items; and

third means for receiving the comment information, provided through the comment interface, for each of the at least first and second items, the comment information being received via the communications network.

1/15

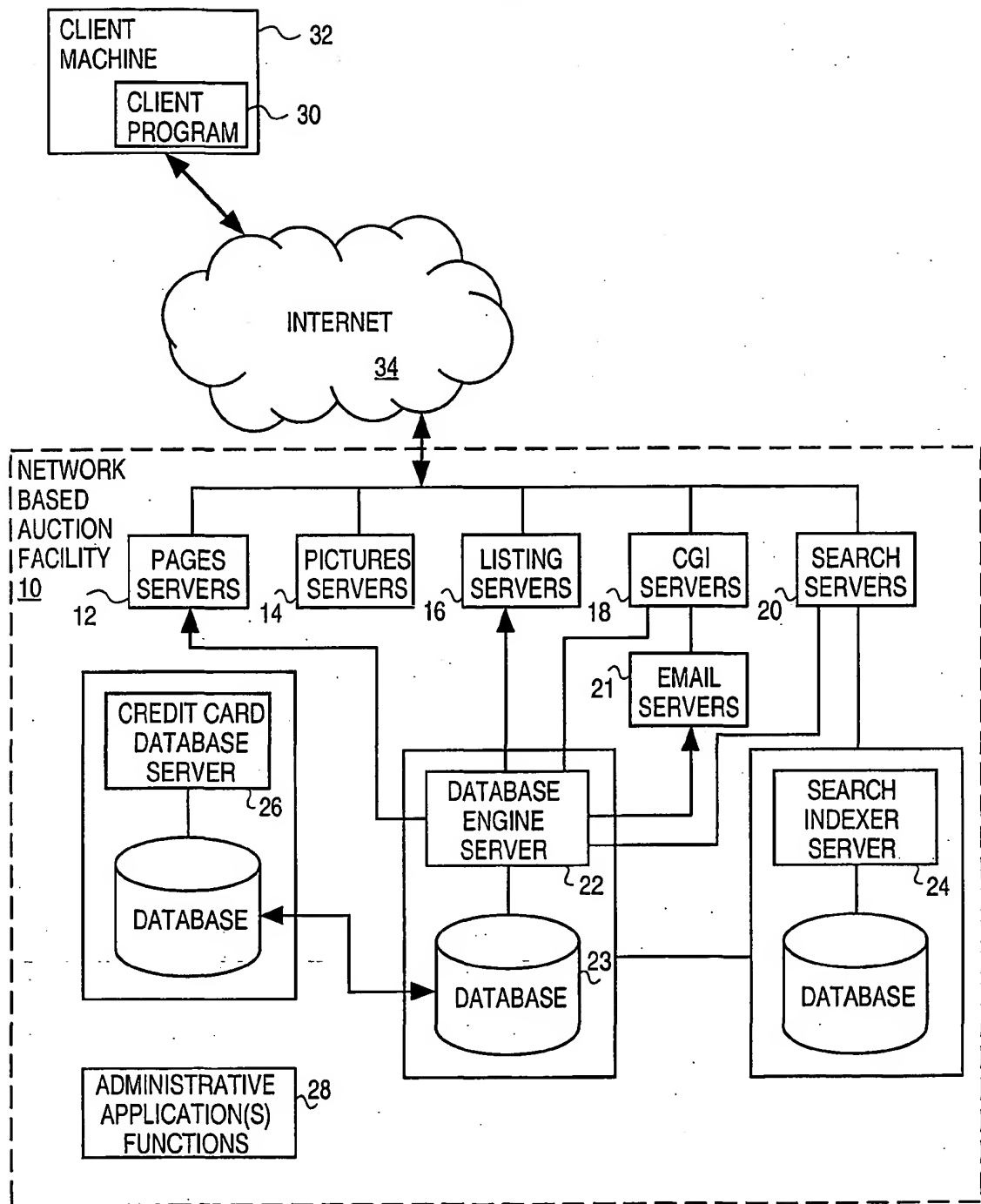


FIG. 1

2/15

23

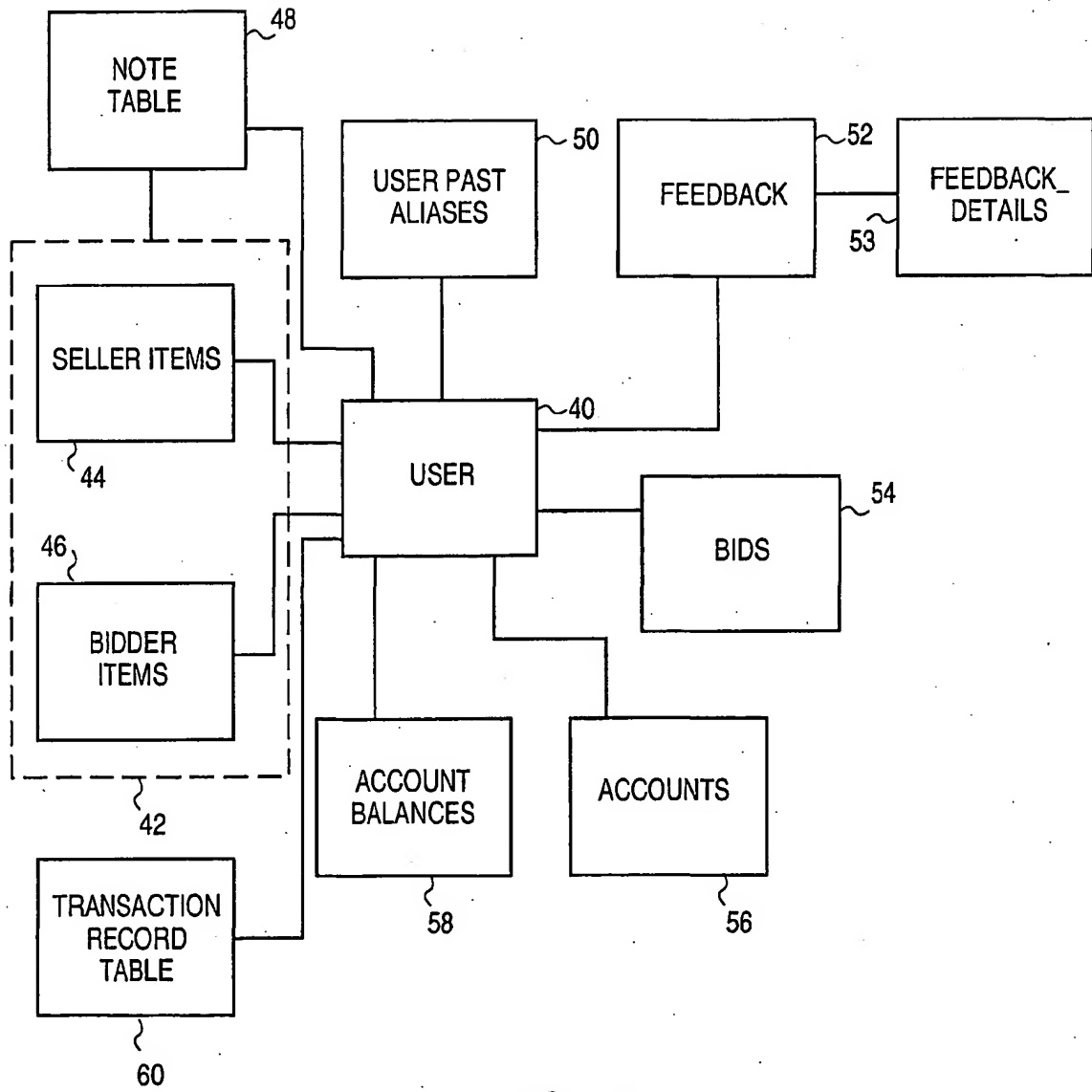


FIG. 2

3/15

60  
↘

TRANSACTION_RECORD TABLE						
TRANSACTION ID	END DATE	BIDDER (USER ID)	SELLER (USER ID)	ITEM NO#	TITLE	FEEDBACK
62	64	66	68	70	72	73

FIG. 3



5/15

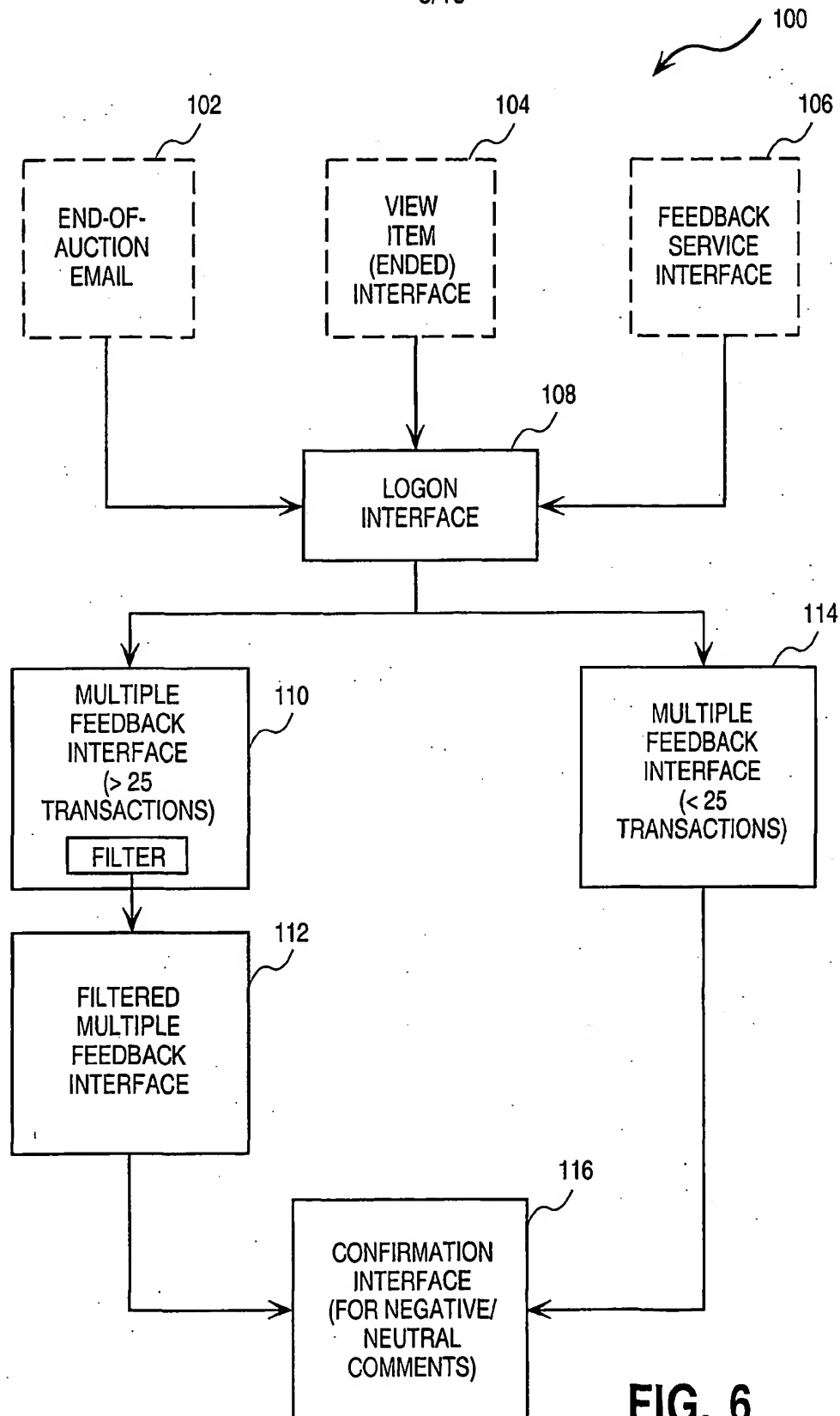


FIG. 6

6/15

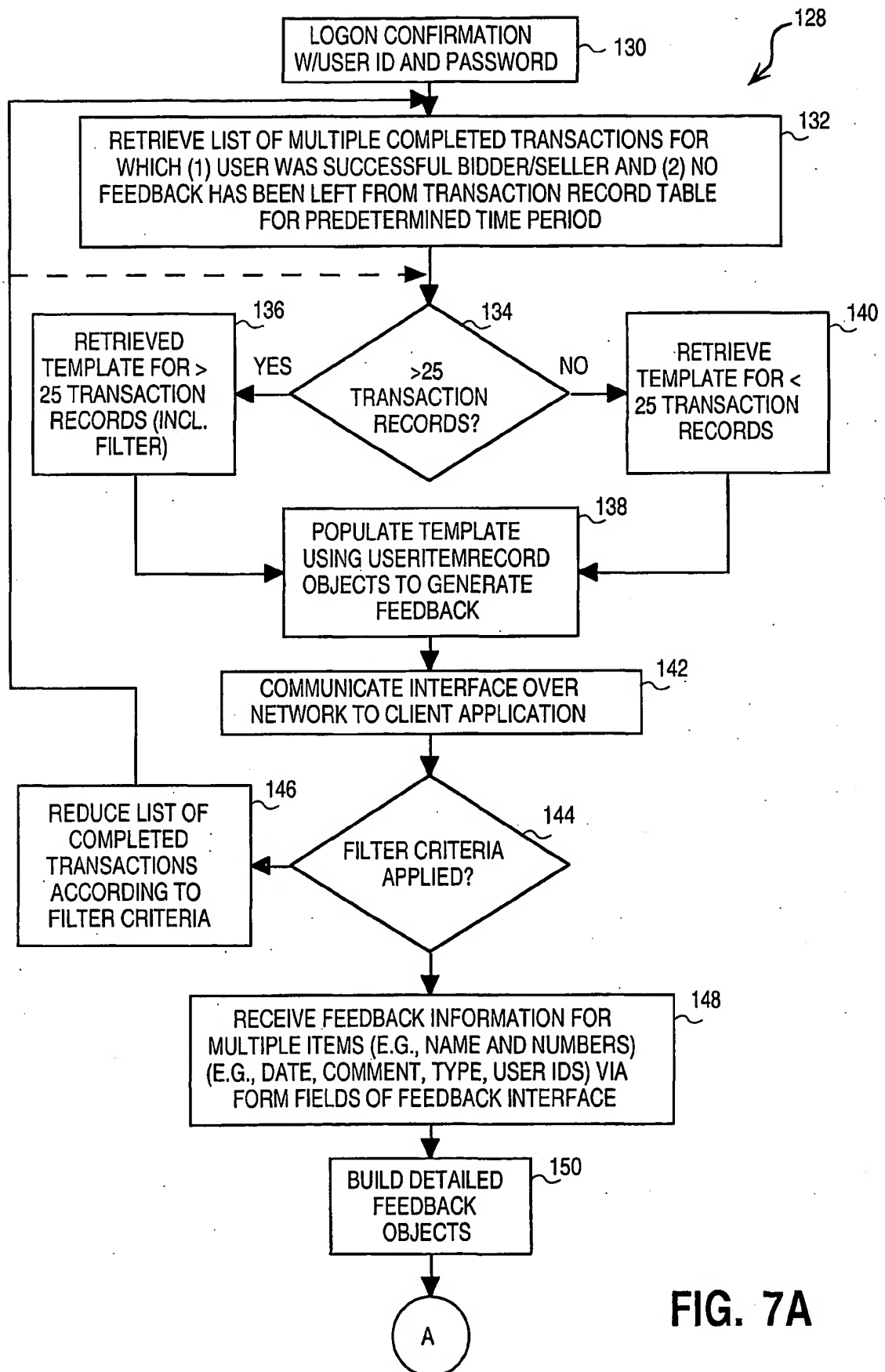


FIG. 7A



7/15

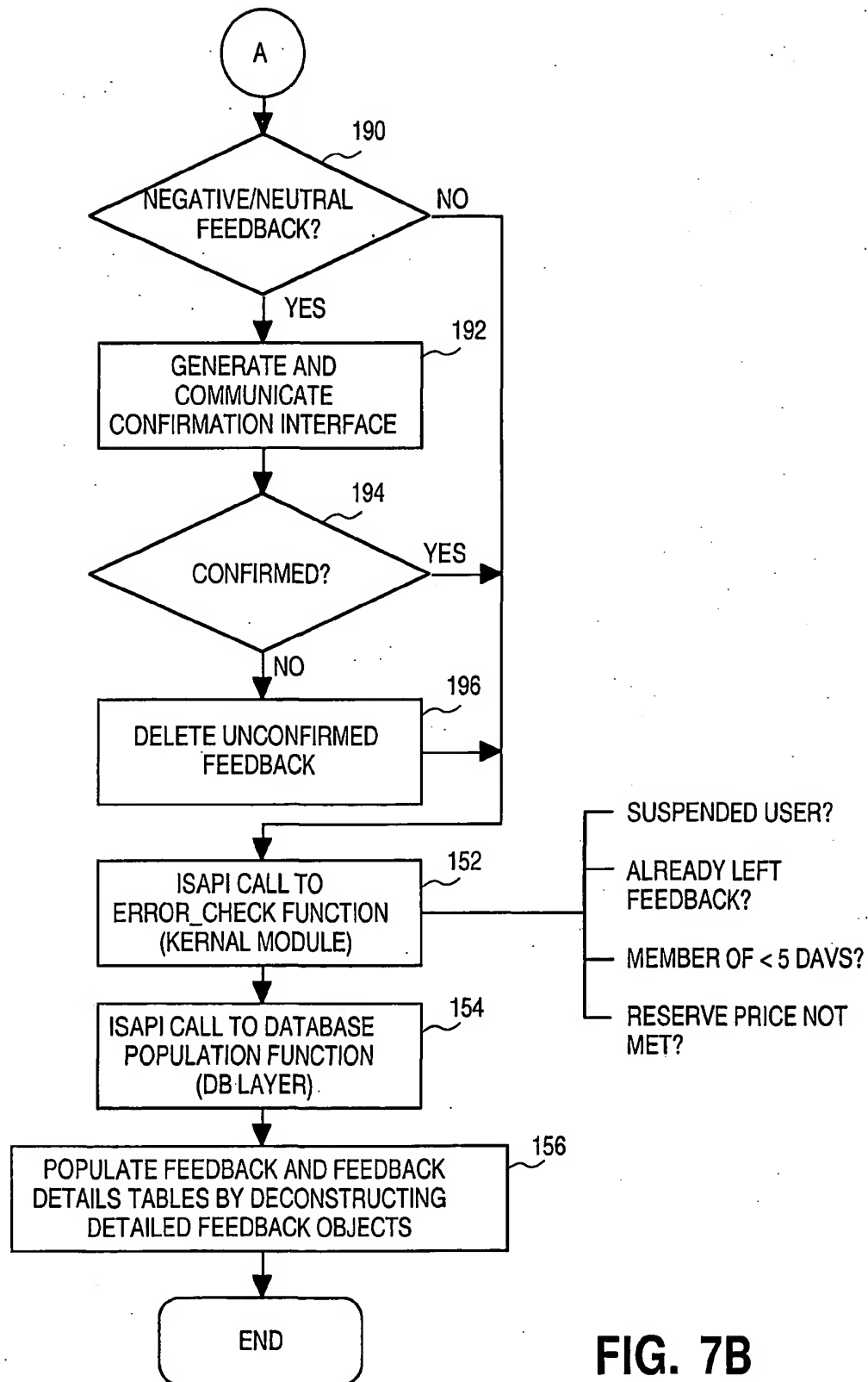


FIG. 7B

8/15

108

tips

☐ Search titles and descriptions

**LOGON INTERFACE-**  
**Leave Feedback about a User**

180  
Your registered User ID 182

182

Your password

184  
Target User ID of person who you are commenting on (Optional)

186  
Item number (optional- including if you want to relate your comments to a transaction)

---

[Announcements](#) | [Register](#) | [Store](#) | [SafeHarbor](#) | [Feedback Forum](#) | [About](#)

**FIG. 8**

9/15

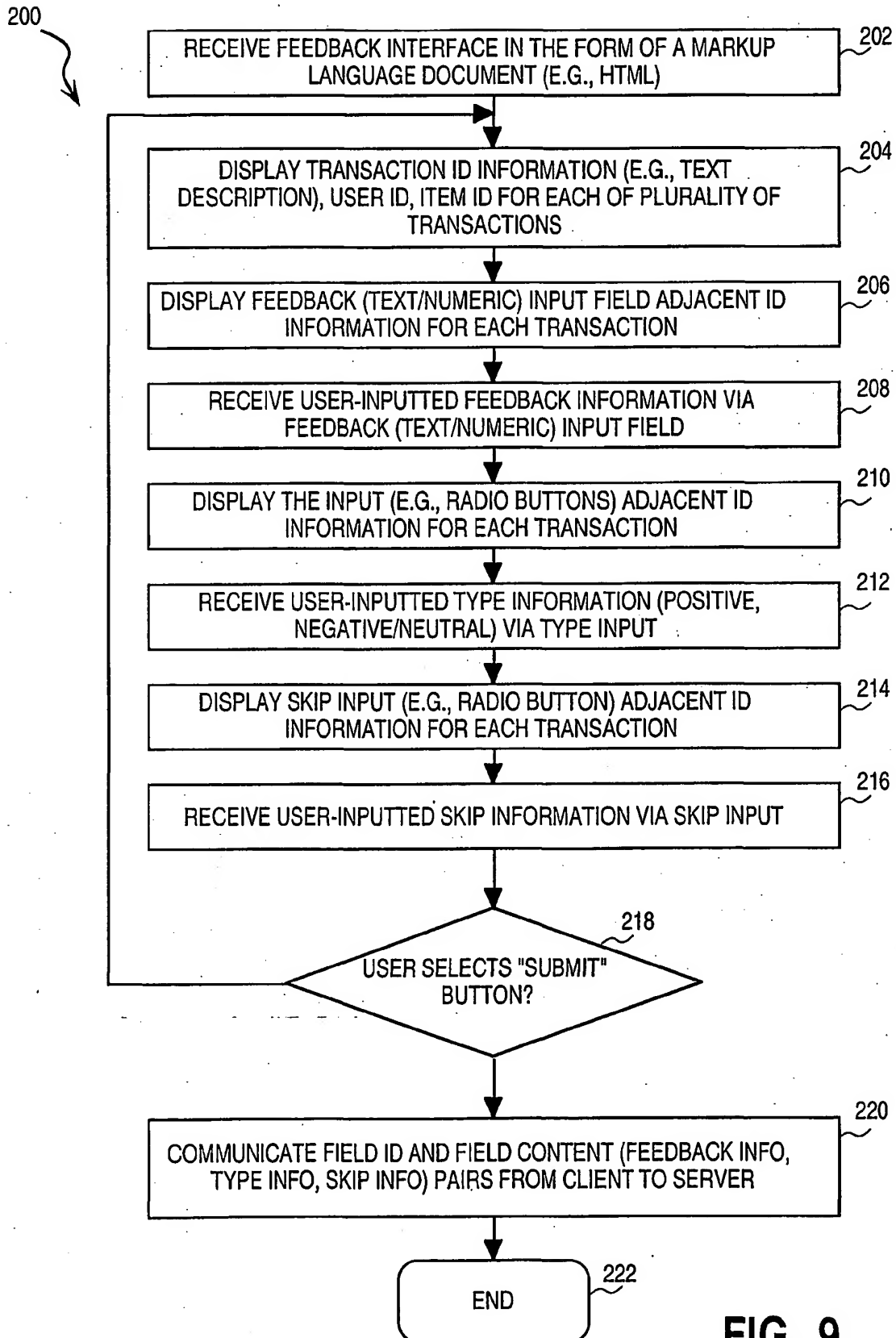


FIG. 9

10/15

110

### Leave Feedback about a User

To leave feedback, enter your comment and select the "Leave Feedback" button on the bottom of the page.

You have 100 Feedbacks to leave. Filter by User ID or Item#

User ID	Item#	Item	Ended
230 skippy1 (-45)	226164216	1933 Goudey # 220 Lefty Grove	01/10 23:10
Is your comment positive, negative, or neutral?			
<input type="radio"/> positive <input type="radio"/> negative <input type="radio"/> neutral <input checked="" type="radio"/> Don't leave feedback now			
<input type="text"/>			
Your comment (max. 80 characters)			
pete1 (-45)	226164217	Book - War and Peace	01/9 23:10
Is your comment positive, negative, or neutral?			
<input type="radio"/> positive <input type="radio"/> negative <input type="radio"/> neutral <input type="radio"/> Don't leave feedback now			
<input type="text"/>			
Your comment (max. 80 characters)			
mark1 (-45)	226164218	Beanie Baby	01/12 8:00
Is your comment positive, negative, or neutral?			
<input type="radio"/> positive <input type="radio"/> negative <input type="radio"/> neutral <input type="radio"/> Don't leave feedback now			
<input type="text"/>			
Your comment (max. 80 characters)			
<input type="button" value="Leave Feedback"/> for all selected items on this page <input type="button" value="Previous Items"/> <input type="button" value="More Items"/>			

FIG. 10

11/15

112

**Leave Feedback about a User**  
To leave feedback, enter your comment and select the "Leave Feedback" button on the bottom of the page.

You have 100 Feedbacks to leave. Filter by User ID or Item#

User ID	Item#	Item	Ended
230 skippy1 (-45)	226164216	<u>1933 Goudey # 220 Lefty Grove</u>	01/10 23:10
Is your comment positive, negative, or neutral? <input type="radio"/> positive <input type="radio"/> negative <input type="radio"/> neutral <input checked="" type="radio"/> Don't leave feedback now			
<input type="text"/>			
Your comment (max. 80 characters)			
skippy1 (-45)	226164216	<u>Car - Dodge Stratus</u>	01/13 12:00
Is your comment positive, negative, or neutral? <input type="radio"/> positive <input type="radio"/> negative <input type="radio"/> neutral <input type="radio"/> Don't leave feedback now			
<input type="text"/>			
Your comment (max. 80 characters)			
skippy1 (-45)	226164216	<u>Baseball Bat</u>	01/24 7:54
Is your comment positive, negative, or neutral? <input type="radio"/> positive <input type="radio"/> negative <input type="radio"/> neutral <input type="radio"/> Don't leave feedback now			
<input type="text"/>			
Your comment (max. 80 characters)			
<input type="button" value="Leave Feedback"/> 244 for all selected items on this page <input type="button" value="Previous Items"/> 246 <input type="button" value="More Items"/> 248			

FIG. 11

12/15

114

**Leave Feedback about a User**

To leave feedback, enter your comment and select the "Leave Feedback" button on the bottom of the page.

You have 100 Feedbacks to leave.

User ID	Item#	Item	Ended
230 skippy1 (-45)	226164216	<u>1933 Goudey # 220 Lefty Grove</u>	01/10 23:10

Is your comment positive, negative, or neutral?

☐ positive ☐ negative ☐ neutral ☒ Don't leave feedback now

Your comment (max. 80 characters)

pete1 (-45)      226164217      Book - War and Peace      01/9 23:10

Is your comment positive, negative, or neutral?

☐ positive ☐ negative ☐ neutral ☐ Don't leave feedback now

Your comment (max. 80 characters)

mark1 (-45)      226164218      Beanie Baby      01/12 8:00

Is your comment positive, negative, or neutral?

☐ positive ☐ negative ☐ neutral ☐ Don't leave feedback now

Your comment (max. 80 characters)

**Leave Feedback**

244

for all selected items on this page

**FIG. 12**

13/15

116

**Negative or Neutral Feedback Confirmation**

You are trying to leave a **NEGATIVE** <or **NEUTRAL**> comment for **USER 2** regarding item # 3, "Item Title".

< -----Display Comment Here----- >

If this is not correct, please go back to the previous page to edit your comment or rating.

---

You are trying to leave a **NEGATIVE** <or **NEUTRAL**> comment for **USER 2** regarding item # 3, "Item Title".

< -----Display Comment Here----- >

If this is not correct, please go back to the previous page to edit your comment or rating.

---

You are trying to leave a **NEGATIVE** <or **NEUTRAL**> comment for **USER 2** regarding item # 3, "Item Title".

< -----Display Comment Here----- >

If this is not correct, please go back to the previous page to edit your comment or rating.

---

Click once to  on all these items

**WARNING: You CANNOT retract the comment you leave.**

For this reason, we encourage you to contact your trading partner directly by e-mail or by telephone before leaving a negative feedback comment. Usually, a misunderstanding or dispute can be resolved by telephone. You can request another person's contact information by clicking [here](#).

**FIG. 13**

14/15

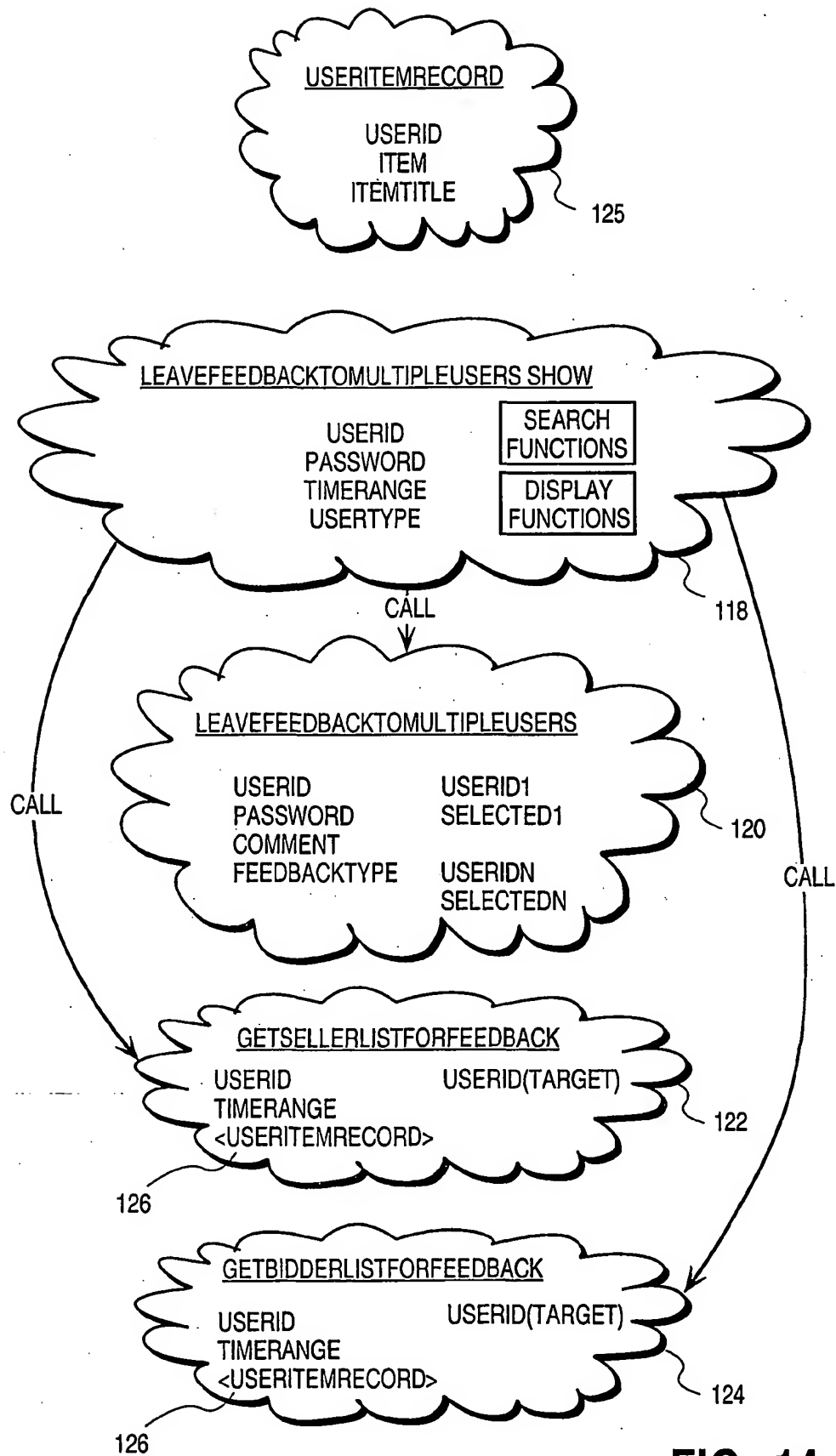


FIG. 14



15/15

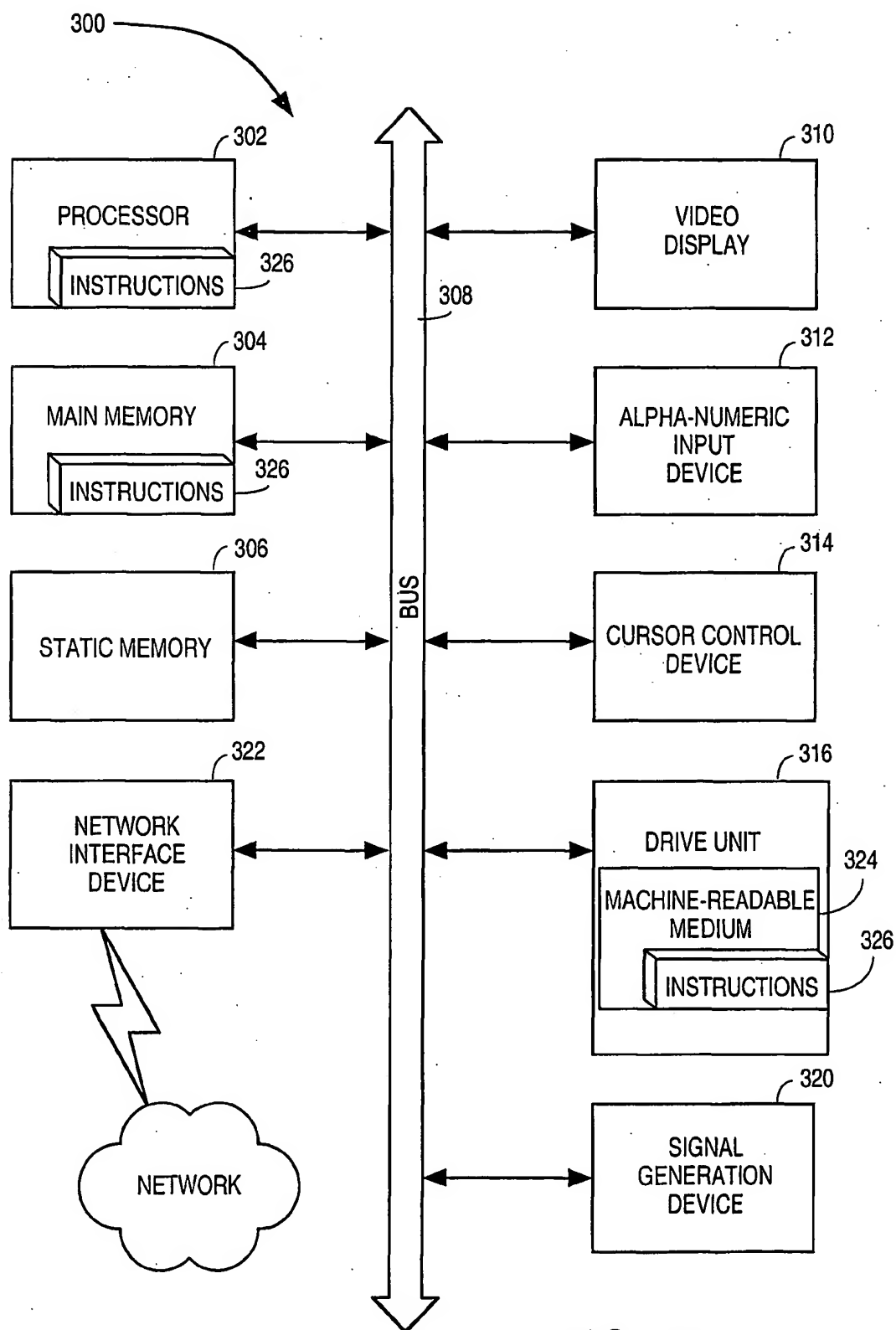


FIG. 15